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RENEWABLE ENERGY

Sea Change?

Eskom, TIA call for ocean-energy innovation bids

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THE Technology Innovation Agency (TIA) and State-owned power utility Eskom launched an 'open innovation challenge' earlier this month, through which they hope to stimulate the development of commercially viable ocean-current-energy technologies.

Submissions are being sought from inventors, small and large companies, entrepreneurs and researchers and a closing date of Tuesday, July 3 has

been set. The TIA will also host workshops for interested parties in Pretoria (June 11), Cape Town (June 19), Port Elizabeth (June 22) and Durban (June 26).

The challenge, details of which have been published on the open innovation section of the TIA's website, suggests that South Africa has conditions for the generation of marine energy, citing Eskom research indicating a potential generation capacity of 42 GW.

"The Agulhas current along the Indian Ocean coast is among the strongest on the planet," the document states, while also acknowledging the difficulties associated with harnessing that energy.

The open innovation challenge is looking for proved-concept proposals that are environmentally and

aesthetically sensitive, and have potential for technology development on a commercial scale.

The submissions being sought are for 1.5 kW to 50 kW solutions that would be positioned at a water depth of between 20 m and 2 000 m and could operate at current speeds of 1 m/s to 4 m/s. The solutions should also have an electrical efficiency of between 60% and 90% and be within 1 km to 20 km of a shore grid connection.

The technology must also not endanger the estuaries and/or aquatic life, nor distort the natural beauty of the coastline, and should be suitable for South African conditions.

The Research Institute for Innovation and Sustainability, a local innovation consultancy, has been appointed by the TIA to project-manage the challenge.